THAT WHICH IS CLAIMED IS:

1. A blood set for use in an extracorporeal blood transporting process, which set comprises set tubing having a patient connector on one end thereof and having a first branch tube for connection with a source of physiological solution, said first branch tube connecting with said set tubing between the ends thereof, said first branch tubing communicating in branching relation with a second connector which is in removable, sealed connection with the patient connector, whereby said set comprises a closed loop of tubing.

2. The set of Claim 1 which carries a length of roller pump tubing as an integral part of the set tubing.

3. The set of Claim 2 in which said first branch tube connects with the set tubing at a position adjacent to one end of the roller pump tubing.

4. The set of Claim 1 in which said first branch tube connects with the set tubing at a position between said patient connector and a degassing chamber carried in communication with the set tubing between the ends of the set.

5. The set of Claim 1 in which said first branch tubing connects with the set tubing by connection to a degassing chamber carried as part of said set tubing and in communication with said set tubing between ends of the set.

6. The set of Claim 1 in which said first branch tube carries a connector on an outer end thereof for a container of physiological solution.

7. The set of Claim 1 in which said first branch tube is permanently and integrally connected to said set.

8. The set of Claim 1 in which said patent and second connectors each have a minimum flow-through bore diameter of at least 2mm.

9. A blood flow set for use in an extracorporeal blood transporting process, which set comprises set tubing for primary blood flow therethrough and having a patient connector on one end thereof, said set having a first branch tube extending from said set tubing for connection with a source of physiological solution, said first branch tube communicating in branching relation with a second connector, said connector being capable of sealing connection with said patient connector, whereby said set may be formed into closed loop of tubing by connection of the patient connector with the second connector after use to facilitate rinse-back of blood.

10. The set of Claim 9 in which said set tubing carries a length of roller pump tubing as an integral part of the set tubing.

11. The set of Claim 9 in which said patient and second connectors each have a minimum flow - through bore diameter of at least 2mm.

12. The set of Claim 11 in which said first branch tube connects with the set tubing at a position between said patient connector and a degassing chamber carried in communication with the set tubing between the ends of the set.

13. The set of Claim 9 which carries a length of roller pump tubing as an integral part of the set tubing, and said first branch tube connects with the set tubing at a position adjacent to one end of the roller pump tubing.

14. The set of Claim 9 in which a degassing chamber is carried in communication with the set tubing between the ends of the set, said first branch tubing connecting with the set tubing at a position between the patient connector and the degassing chamber.

15. The set of Claim 9 in which said second connector communicates in branching relation with said first branch tube by connection with further branch tubing having branching connection with said first branch tube.

16. The set of Claim 9 in which said set tubing carries a length of roller pump tubing as an integral part of the set tubing and in which said patient connector and second connector each have a minimum flow-through bore diameter of at least 2 mm.

17. The set of Claim 16 in which said first branch tube connects with the set tubing at a position adjacent to one end of the roller pump tubing.

18. The set of Claim 16 in which said first branch tube connects with the set tubing at a position between said patient connector and a degassing chamber carried in communication with a set tubing between the ends of the sets.

19. The set of Claim 16 in which a degassing chamber is carried in communication with the set tubing between the ends of the set, said first branch tubing connecting with the set through said degassing chamber.

20. The set of Claim 19 in which said first branch tube connects with said degassing chamber through a top portion of said degassing chamber so as to communicate with an air bubble in said degassing chamber during use.

21. The set of Claim 16 in which said second connector communicates in branching relation with said first branch tube by connection with further branch tubing having branching connection with said first branch tube.

22. The set of Claim 16 in which said patient connector and said second connector are in removable, sealed connection, whereby said set comprises a closed loop of tubing.